Right for today,
ready for tomorrow
IBM
Personal System/2

Choosing a computer is more than deciding on a particular model—it's deciding what company you want to do business with. That's why, before you look at the IBM Personal System/2® product line, we'd like you to look at The Bigger Picture. It's all the reasons why organizations of every size have chosen IBM as their business partner.

The Bigger Picture is people—yours and ours—sitting down to plan the solution that will be most profitable to you. It's our 50 years of experience helping customers solve millions of problems. It's a reputation for top-quality products that's tough to equal. And it's the kind of service, support and education that help you get the most from your PS/2.™

Your business doesn't have to be big to benefit from the combination of people, products and resources that make up The Bigger Picture. The way we see it, small businesses deserve more than a little attention—and they get it from IBM Authorized Dealers and solution specialists who understand their concerns.

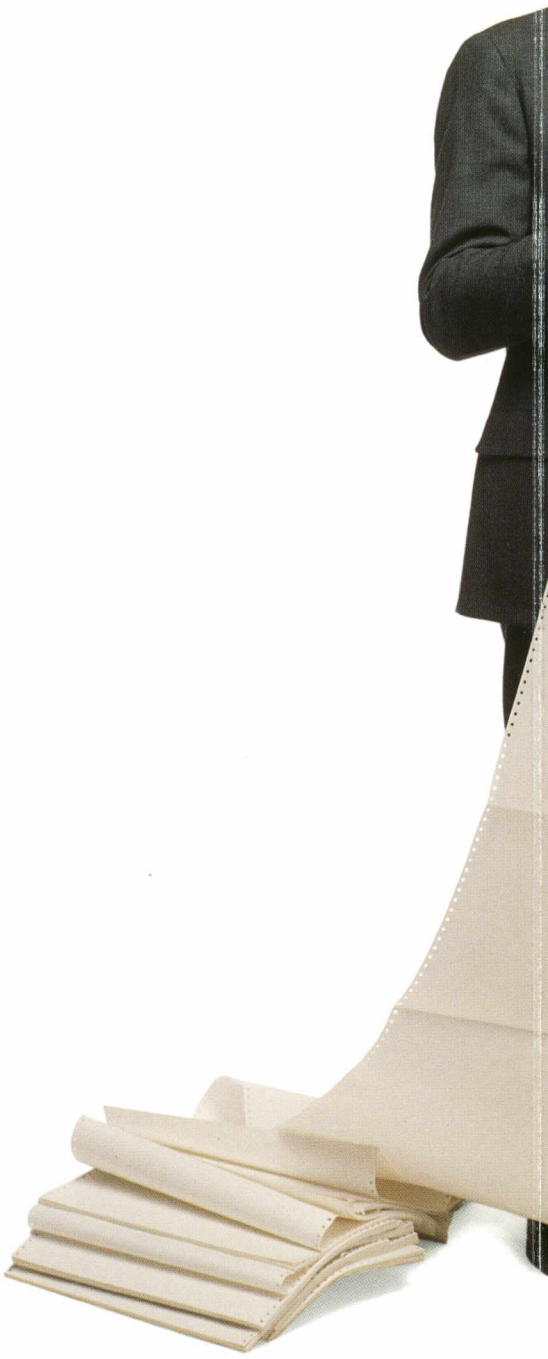
For all businesses, the future looks bright when they're part of The Bigger Picture. That's because, when IBM designs new products, we not only anticipate tomorrow's technology, we anticipate our customers' future needs.

So when you turn the page to look at Personal System/2, keep The Bigger Picture in mind. We think you'll like the view.

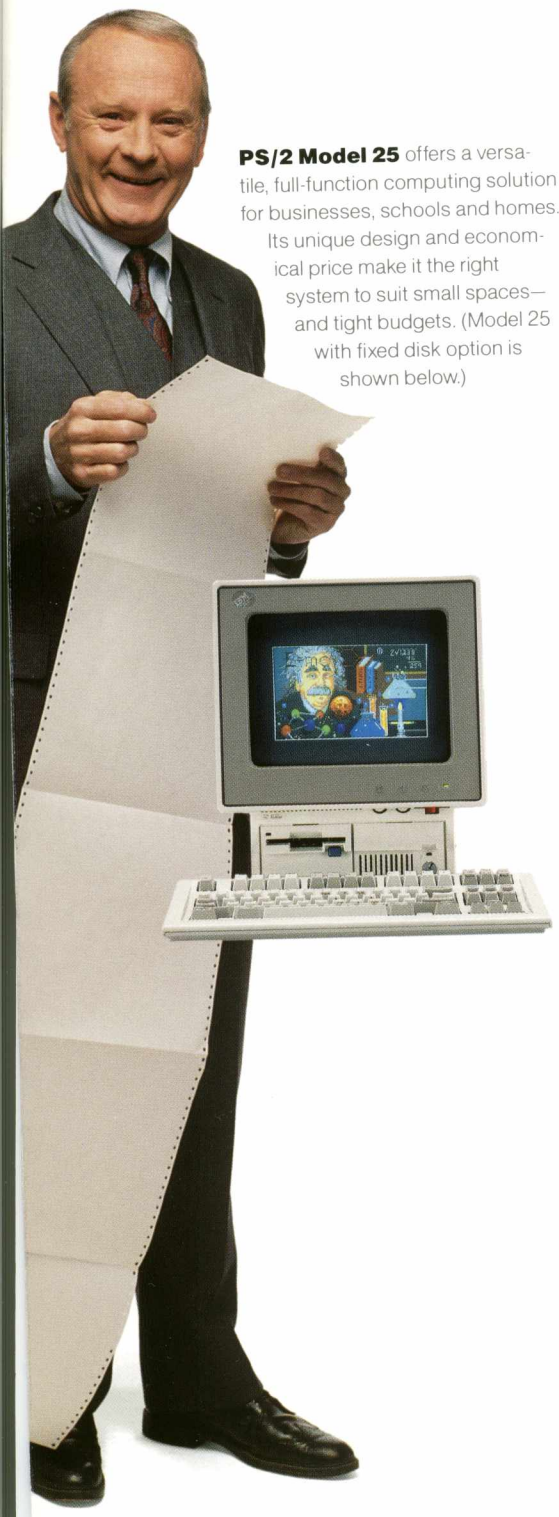
IBM

The Bigger Picture

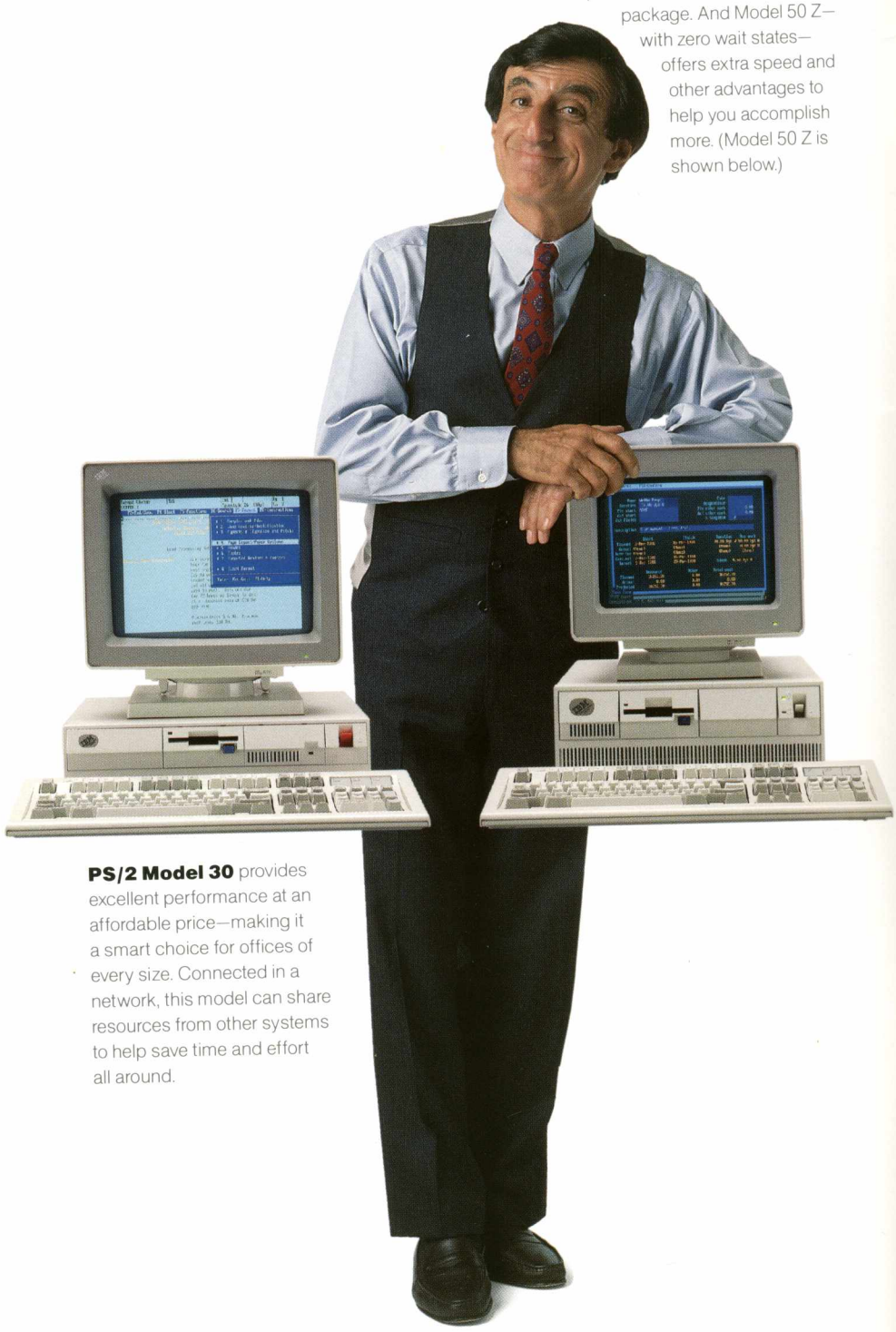
Whatever your needs, there's an IBM Personal System/2 to meet them



PS/2 Model 25 offers a versatile, full-function computing solution for businesses, schools and homes. Its unique design and economical price make it the right system to suit small spaces—and tight budgets. (Model 25 with fixed disk option is shown below.)



PS/2 Models 50 and 50 Z are the ideal desktop systems to help raise productivity to new heights. Both deliver advanced performance in a streamlined package. And Model 50 Z—with zero wait states—offers extra speed and other advantages to help you accomplish more. (Model 50 Z is shown below.)



PS/2 Model 30 provides excellent performance at an affordable price—making it a smart choice for offices of every size. Connected in a network, this model can share resources from other systems to help save time and effort all around.

PS/2 Model 80 386 offers powerful and versatile support for a single user or even several users. As a stand-alone system, or a network server/bridge, it can bring the benefits of advanced PS/2 technology and connectivity to one and all.

PS/2 Model 60 combines advanced capability and high capacity. Installed in a network, it can be used as a file server to help you and your associates work at peak efficiency. Or it can be used to provide rapid communications for an entire workgroup.

PS/2 Model 70 386 puts 80386 processing power on your desktop—giving you power and speed to spare. On its own or in a network, this model is a match for the most intensive business computing environments. And it has plenty of power to support sophisticated applications for science and engineering, CAD/CAM programs, and more.

IBM Personal System/2: Setting the pace in personal computing

And that's what these fast-changing times demand. Where once word processing alone did the job, now desktop publishing is frequently required as well. Where simple spreadsheets used to meet accounting needs, today complex financial models are the rule.

Where one application used to be enough, now several often have to be run at once. And, while stand-alone computing was the norm not long ago, now connections are called for—within networks, to departmental systems, to central mainframes, to outside information sources.

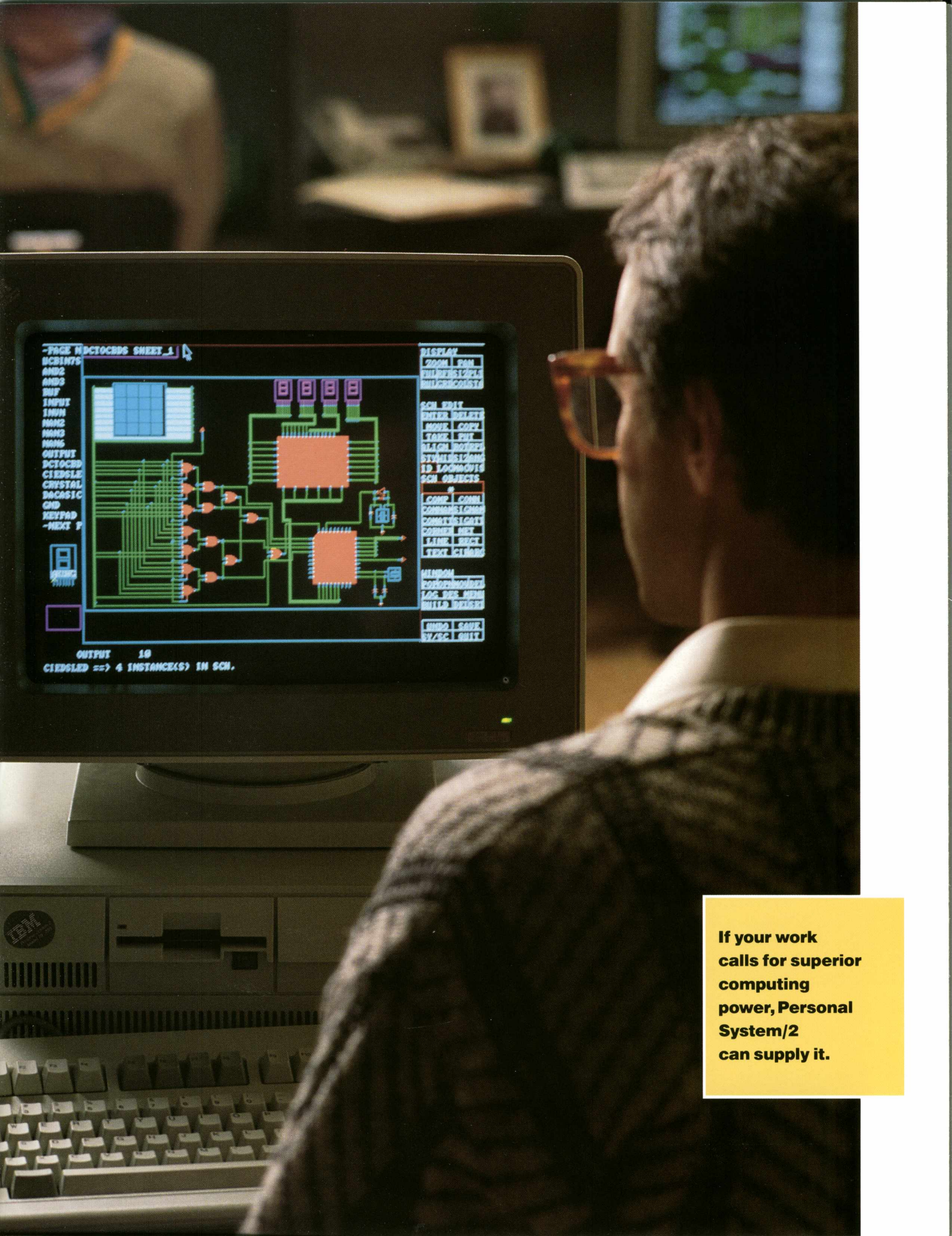
Right for today and ready for tomorrow, Personal System/2 has what it takes to help you meet these demands head-on.

Power... performance... capacity... compatibility... connectivity... reliability... and ease

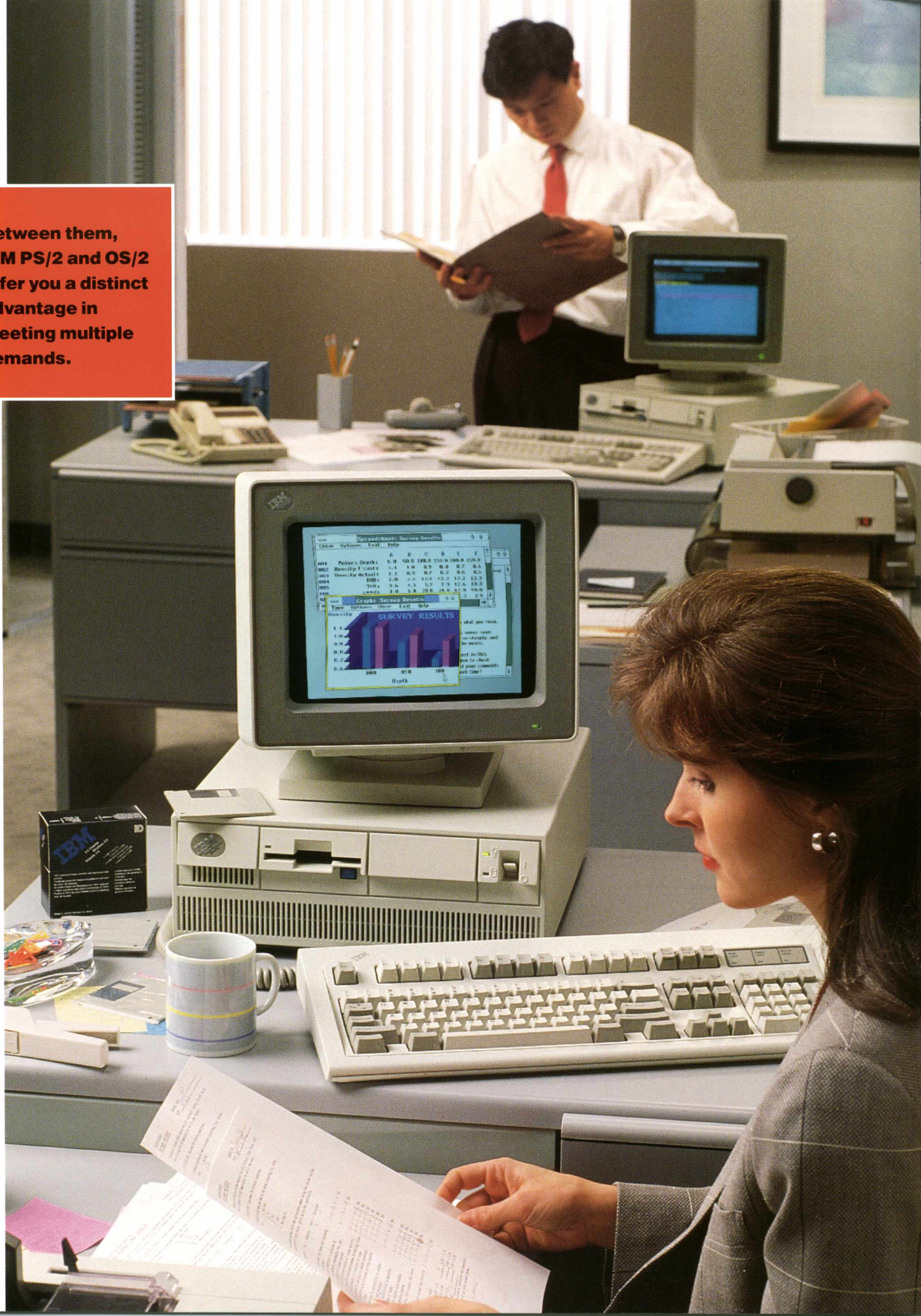
Put Personal System/2 to work in any stand-alone or systems setting—from departmental networks to host-connected workstations to company-wide or campuswide communications. Equip everyone—experienced users and entry-level users alike—with workstations that truly match the work they do.

For better answers to all your business needs, turn to IBM Personal System/2—an entire family of products based on advanced technology that redefines personal computing. Personal System/2 is superior system units, displays and printers... outstanding standards for graphics... an enhanced DOS... the powerful new IBM Operating System/2™... impressive connectivity capabilities... and a platform for growth that's unparalleled in the industry.

Personal System/2 covers the whole range of support you might require to implement strategies for business or education. It's much more than a solution for personal productivity—it's a total solution for organizational efficiency.



If your work calls for superior computing power, Personal System/2 can supply it.


Between them, IBM PS/2 and OS/2 offer you a distinct advantage in meeting multiple demands.
SURVEY RESULTS
IBM

With PS/2 system units, you've got a range of choices to suit your needs. Two floorstanding models and four desktop models provide 80386, 80286 or 8086 microprocessing power—and memory and storage to match. Add to this a wide selection of software and options, and there's almost no limit to your opportunities to improve efficiency and extend your competitive lead with Personal System/2.

Personal System/2: A smart investment for today and tomorrow

Personal System/2 is more than a smart approach to efficiency—it's a smart business investment as well. That's because this family of products offers technological breadth and depth that represent extraordinary value.

System solutions at microcomputer prices

Use just one powerful PS/2 as a gateway, and you can enhance communications for a group. Use it as a server, and you can increase the cost-effectiveness of an entire network.

The point is, PS/2 products are designed to work powerfully and smoothly in a connected setting, so the value of each model can extend well beyond the model itself.

And the value can build—because IBM Operating System/2 will permit a system[1] to take on increasing numbers of jobs. In a typical business, for example, a person using a PS/2 will be able to:

- Support multiple applications
- Support multiple applications and host sessions
- Even support multiple applications, host sessions and a network session

Additional value can be gained from a large number of resources. Because the PS/2 family is compatible, most applications[2] and peripherals used with one model can be easily shared or used with others.

A sound investment in the future

Compatible machines—and consistent operations—are the cornerstone of an even larger plan IBM has for the future: Systems Application Architecture. It's a plan to make software increasingly uniform—and achieve integration of computing products at every level. As the first phase of that plan, IBM Operating System/2 puts Personal System/2—and you—squarely in position for tomorrow.

Operating System/2 Extended Edition will provide built-in relational data base capabilities—and make it easy to create, maintain and access data bases of other systems and mainframes. And because OS/2™ will also provide a consistent user interface, once people know data base operations on one PS/2

model, their skills can more easily be transferred to another. So the dollars you spend on training can stretch further than ever before.

Together, Personal System/2 and Operating System/2 provide a firm foundation for future growth.

IBM Micro Channel™ architecture is key to that growth. It prepares the PS/2 family[3] for expansion—to levels of capability and capacity that most microcomputers can't approach. More peripherals can be attached—and supported simultaneously. On the high-end PS/2 models, memory can be boosted on the system board, then increased all the way to 16MB with memory expansion options.

On the two most powerful 80386 Personal System/2 models, memory expansion boards carry one million bits per chip. That's because the architecture accepts the same kind of chip used in IBM's mainframe systems—leaving expansion slots available for further memory expansion or other options.

Whichever Personal System/2 model you choose, you'll have the storage capacity—and expandability—to support its memory. The PS/2 floorstanding systems, for example, come ready with 44MB, 70MB, 115MB, even 314MB fixed disks—and with optional second fixed disks, those storage numbers can at least double. For extra convenience as well as capacity, a second diskette drive and other storage options—like a 200MB optical disk or a streaming tape drive—can be installed on most Personal System/2 models.

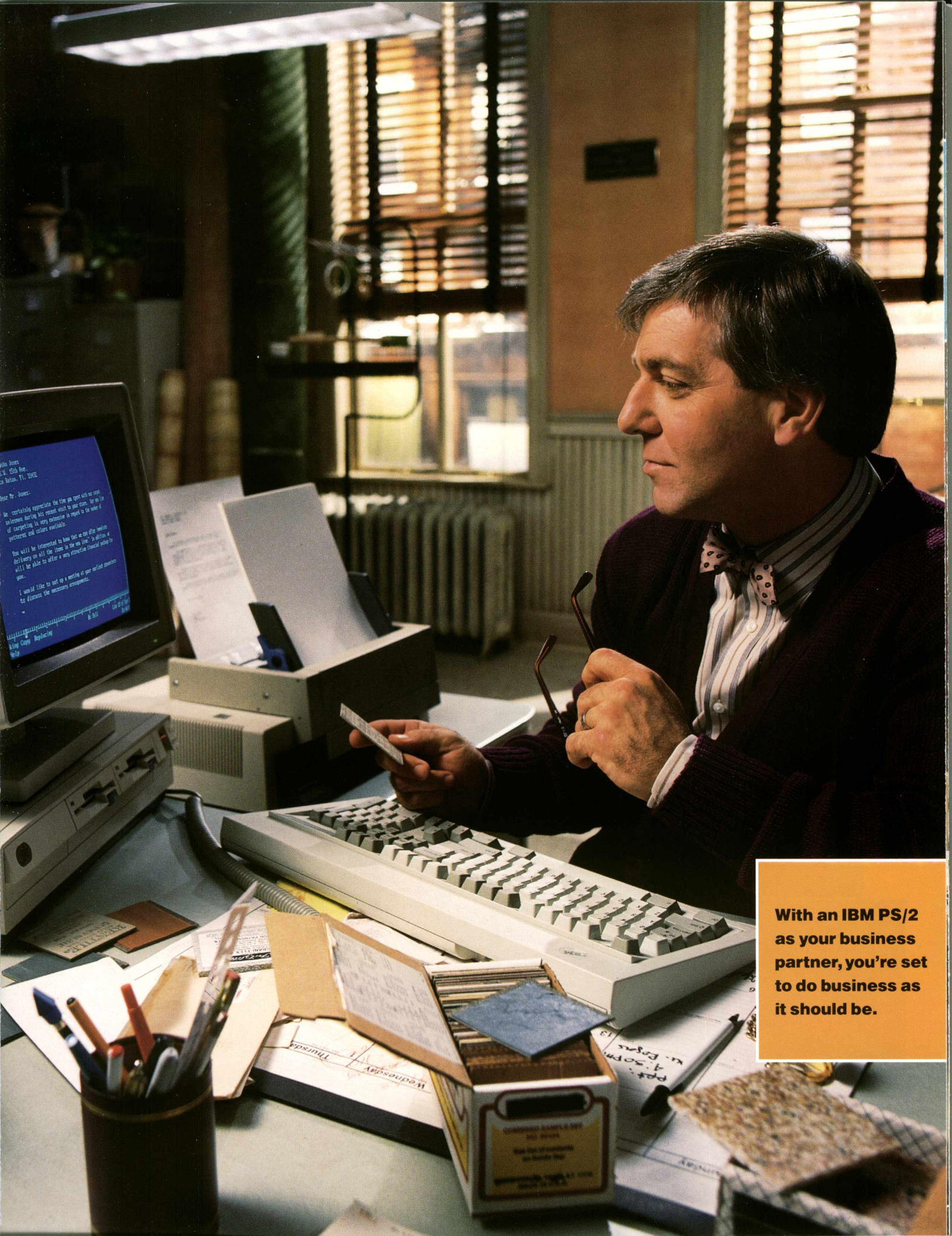
On a larger systems scale, more system units can be added and supported within existing networks. And multiple connections with mainframes and minicomputers can be established, too.

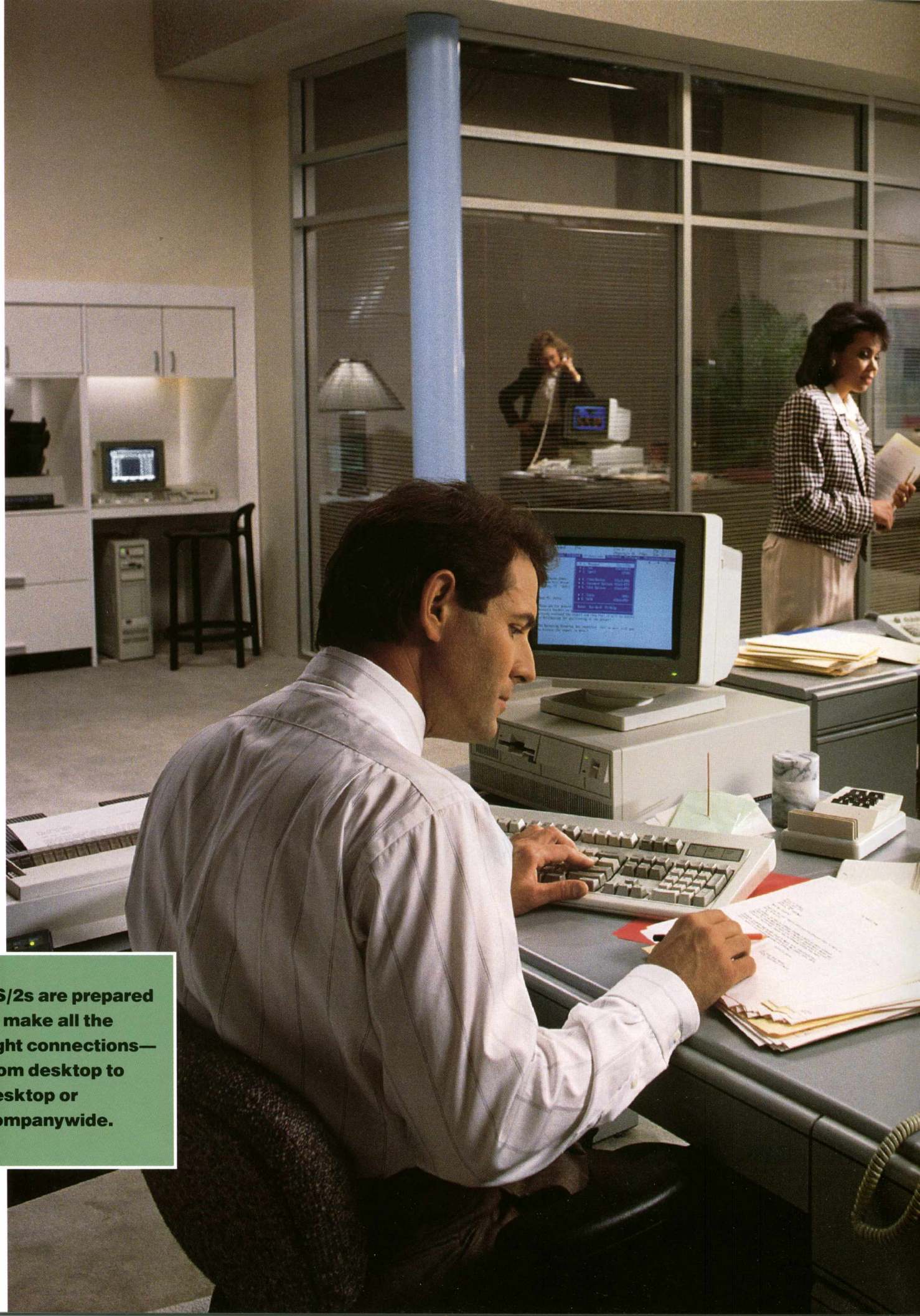
No matter how fast your business or school enrollment grows, Personal System/2 will keep pace. It's computing technology you can build on—instead of replace. So whether you add more systems or add capabilities to existing systems, you can protect your investment in this generation of personal computing products for years to come.

Protection for your past investment

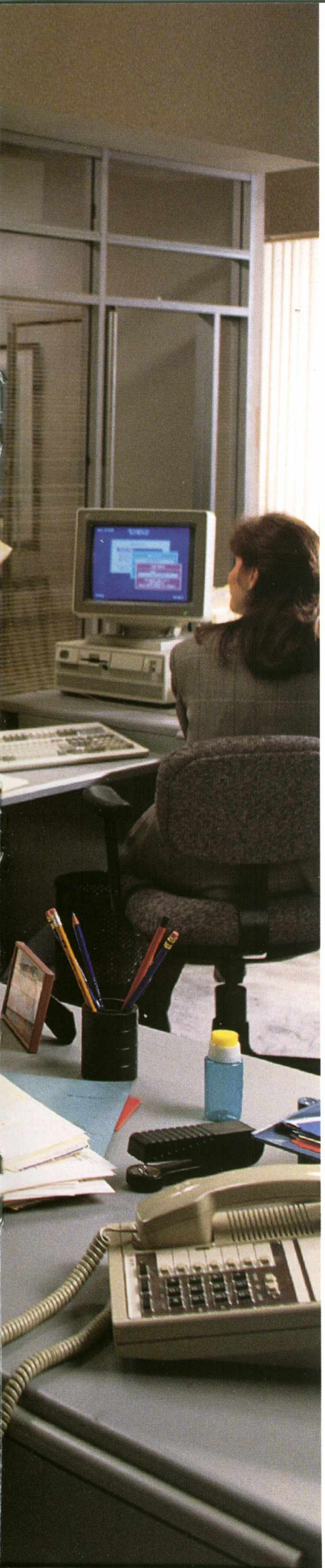
You can protect your investment in IBM Personal Computers as well—because the Personal System/2 family's compatibility doesn't stop with the family alone. IBM PS/2s can be introduced to existing local area networks (LANs) to work side by side with the IBM Personal Computer, Personal Computer XT,™ and Personal Computer AT® systems you've already got in place. They'll also work compatibly with the IBM PC Convertibles you send or take on the road.

Easy coexistence of the Personal System/2 and IBM Personal Computer families even extends to files and applications. Personal System/2 uses high-capacity 3.5-inch diskettes—yet you can still use files and most applications stored on 5.25-inch diskettes. Several media conversion options are available to provide easy migration of data and programs[2] between IBM PCs and PS/2s.


With an IBM PS/2 as your business partner, you're set to do business as it should be.



PS/2s are prepared to make all the right connections—from desktop to desktop or companywide.



The Personal System/2 difference

A wealth of distinctive features make Personal System/2 much different—and much better—than what has come before. Inside and out, they're the reasons why PS/2 strikes a perfect balance of power, simplicity and sophistication.

Micro Channel architecture

In the past, many personal computing systems were hard-pressed to meet growing business demands. Few could deliver the fast throughput, rapid communications and large-capacity storage so critical today.

Enter Personal System/2—with Micro Channel architecture that equips the family[3] to offer levels of performance many earlier systems couldn't offer even with upgrades.

Fast, efficient data paths, advanced system architecture, extended microcode support, and more direct memory access channels are some of the features that distinguish Personal System/2 from other computers. Since data can flow through these systems more quickly and directly, the pace of processing and throughput picks up and smooths out. The benefits include high-speed calculations and communications—plus the ability to support multiple tasks and input/output operations without sacrificing throughput or risking system conflicts.

Integrated functions

Very Large-Scale Integration (VLSI) is a driving principle of design in Personal System/2. Coupled with Surface Mount Technology (SMT)—a method of mounting circuitry directly on the face of the system board—VLSI makes it possible to pack more functions into less space. As a result, the PS/2 models contain fewer separate components yet offer more built-in capabilities. Not only are advanced color and monochrome graphics and text capabilities built in, so is support for a display, keyboard and personal printer—as well as support for an optional pointing device.

There's more. Integrated functions add connectivity as well as capability to PS/2s—with built-in serial ports. They add reliability, too, because fewer components mean fewer potential problems. That simple fact translates into optimum performance, year after year.

Color, graphics and new analog displays

A change in technology is the basis of dazzling display performance with Personal System/2. With IBM's PS/2 analog color displays, you can view up to 256 colors at a time—from a palette of over 256,000. And colors automatically convert to up to 64 shades of gray on the analog monochrome display.

In color or monochrome, the built-in text and graphics capabilities of the Personal System/2 models combine with the enhanced addressability of the PS/2 displays to provide a picture that's sharp, clear and highly detailed. Natural, too. Even digitized photos—of products, property or people—appear natural.

Bigger and better storage media

The big storage story with the IBM Personal System/2 family is about internal fixed disks that range in capacity from 20MB to 314MB. These fixed disks supply the storage required to work with

large data bases or sophisticated accounting packages—at individual workstations or all around a network. And anyone accessing these large fixed disks can count on getting the information they need in a hurry. In fact, some models' fixed disks deliver data up to four times faster than those in IBM PC products of the past.

The smaller storage story with Personal System/2 is about 3.5-inch diskettes that are compact in size but large in capacity—a combination that adds up to more convenience and less diskette swapping. Depending on the model selected, as many as 360 or 720 pages[4] of information can be stored on a single diskette—and easily accessed with a 720KB or 1.44MB diskette drive.

Streamlined design and documentation

Even though the PS/2 models carry so many capabilities, they won't crowd your office. The desktop models are small, streamlined and space saving. And with the floorstanding systems, all that need be placed on a desk are the keyboard and your IBM Personal System/2 display.

The documentation for PS/2 models is as streamlined as the models themselves. Because these systems are so easy to set up, one slim volume and a simple tutorial provide all the documentation required.

Switchless setup, easy expansion

Thanks to convenient ports and plugs, setting up a PS/2 is simple. There are no system switches to set, no need to lift a cover.

Unless, of course, you decide to expand a particular model. Even that operation has been made simple—on the 80286 and 80386 models, snap-in adapter cards make it easy to add features and functions.

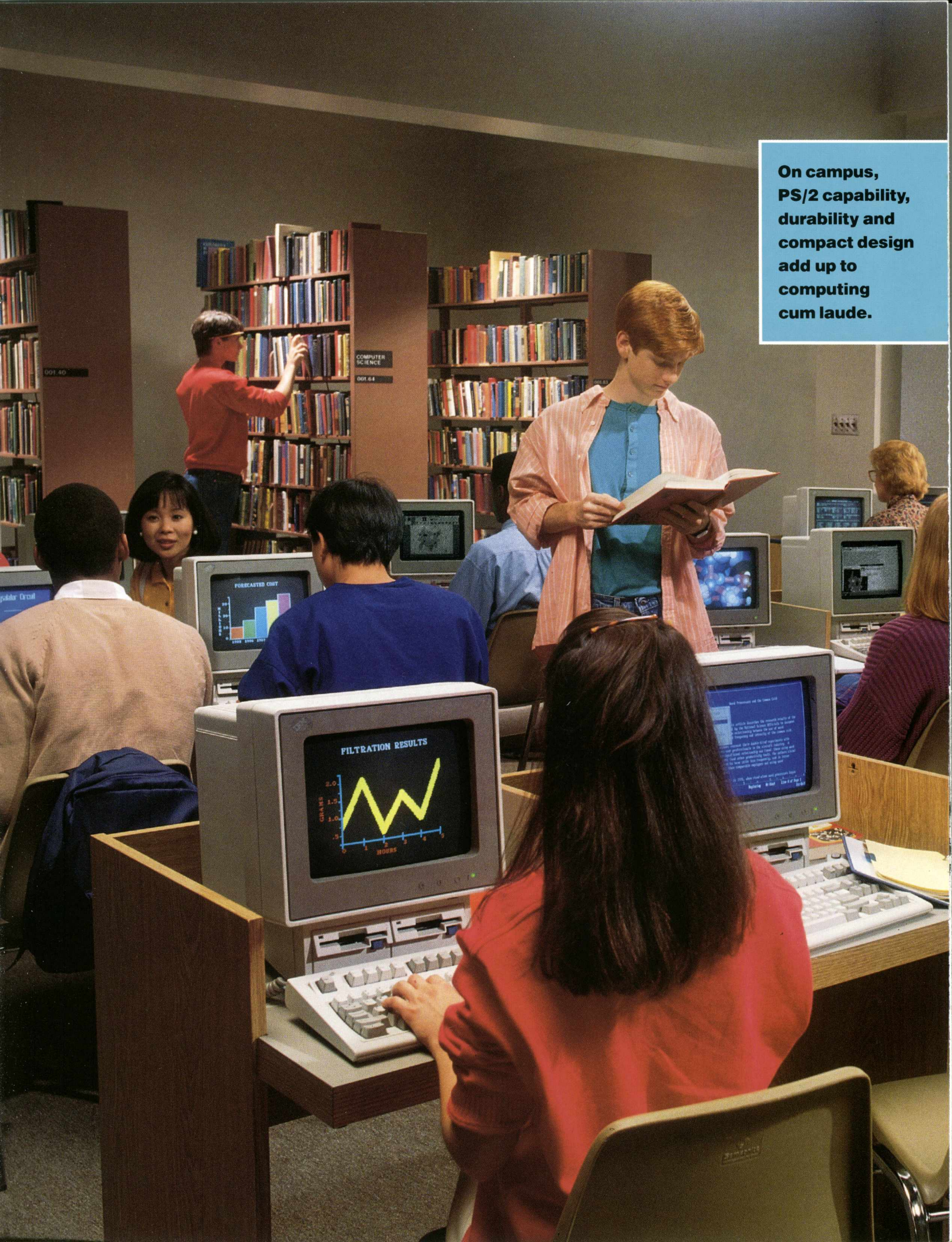
The versatility of Personal System/2

PS/2s fit in practically everywhere. They're used in kindergartens to teach reading and in travel agencies to book connecting flights. They're also used by engineers exploring for oil in the earth's substrata—even by baseball officials tracking averages at ball parks throughout the USA. That's how it is with this versatile family.

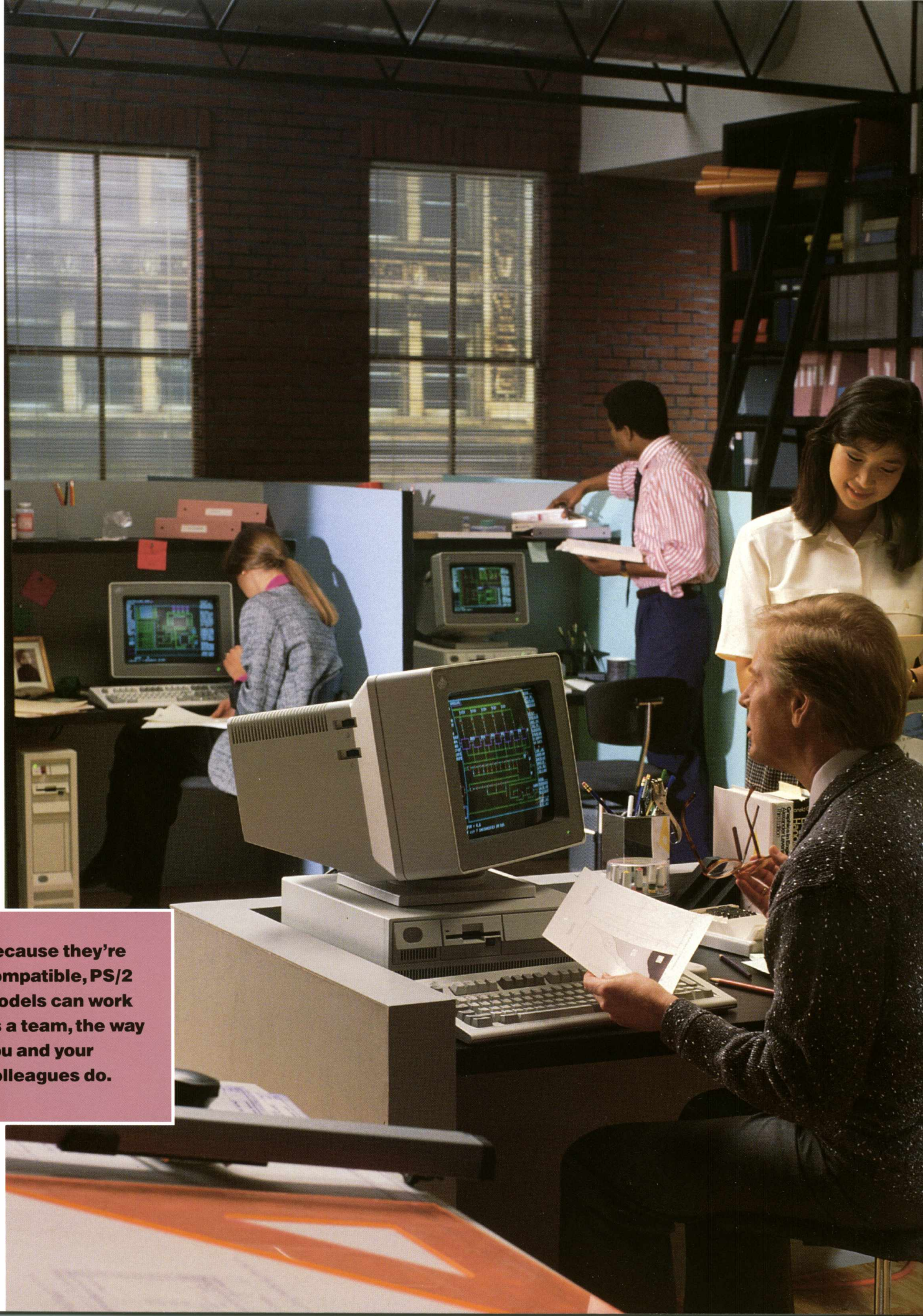
But nowhere is versatility more apparent than in the range of choices PS/2 products offer you. These choices address your needs at every level—from overall business or educational operations to the quality you require on a printed page.

System units

All the models in the Personal System/2 family—Models 25, 30, 50 and 50 Z, 60, 70 386 and 80 386—provide different levels of power, memory and storage to match your immediate needs and your long-term plans.



On campus, PS/2 capability, durability and compact design add up to computing cum laude.



Because they're compatible, PS/2 models can work as a team, the way you and your colleagues do.

Model 25: Whether you're a small-business owner balancing the books, a student writing a term paper, or an executive catching up on work at home, IBM Personal System/2 Model 25 can help you accomplish more in less time. It offers high-performance computing without crowding your space or straining your budget.

Model 30: This PS/2 delivers excellent performance at an affordable price. By itself, it can boost the productivity of a single office or a single user. Connected in a network, it can share resources from other systems to save time and effort.

Models 50 and 50 Z: Designed for desktop convenience, Models 50 and 50 Z offer the kind of performance that can help raise productivity to new heights. Installed in a network or standing alone, these models can help users streamline routine work. So they can finish all of today's work today—and even get a start on tomorrow's.

Model 60: PS/2 Model 60 combines high performance with high capacity, making it an excellent choice for anyone who manages large quantities of information, big projects or tight schedules. In a network, this model can be used as a server for files and programs or to provide rapid communications—so, no matter how much there is to do, everyone can work at peak efficiency.

Model 70 386: Desktop computing reaches new dimensions with Personal System/2 Model 70 386. With its 80386 microprocessor and high-speed memory, this model is a match for the most intensive business computing environment. What's more, it has the processing power to handle highly sophisticated applications in science and engineering, too.

Model 80 386: Fast, capable and versatile, Model 80 386 is the perfect PS/2 to meet the needs of a single user or several. Thanks to its high levels of storage capacity and input/output expandability, you can easily make it your network file or print server—or use it as a communications link—to enhance operations at every station.

Operating systems

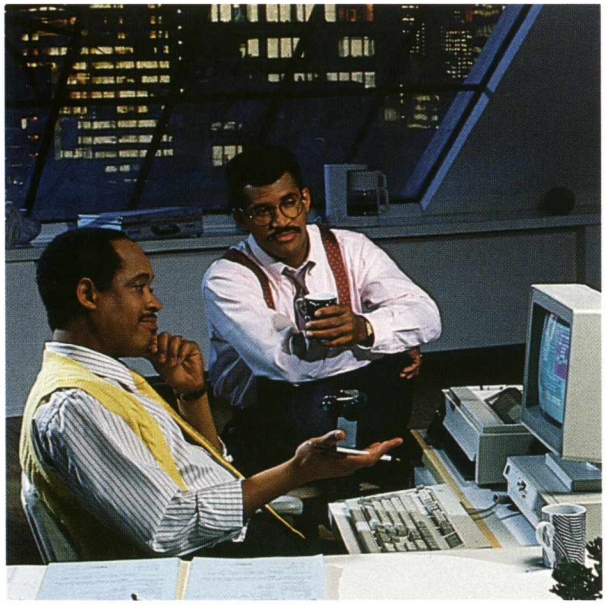
The latest version of the widely accepted IBM Disk Operating System (DOS) Version 3.30 supports the enhanced performance and many of the new functions provided by Personal System/2.[5]

Version 3.30 offers several enhancements over Version 3.20, including:

- Faster access to files that are opened and closed very frequently
- Faster and more secure methods of writing data
- Better support for data base applications requiring access to large numbers of files at once
- Enhanced utility commands

IBM Operating System/2 puts the large memory addressability of the 80286 and 80386 Personal System/2 models at your disposal. Standard Edition provides a way to break through the 640KB memory barrier and support flexible operations with multiple applications using up to 16MB of memory. And those applications can include text and graphics in a windowing environment. Extended Edition will supply all the enhanced functions that the Standard Edition does—and much more. This edi-

tion makes data base management easy, provides all the tools to create a data base, and even reduces the need for data base programming. Extended Edition also includes a powerful communications subsystem that permits multiple connections to hosts and peer stations on a network. That means a PS/2 model can communicate with a public information service and conduct 3270 host sessions and 5250 sessions all at once.



With either edition of OS/2, frequently used applications can be held in memory for quick access. In addition, several tasks can be handled at a time. And whether applications are being held at the ready or are running, you can switch quickly from one to another.

The wealth of features common to both editions of this powerful operating system include:

- 16MB memory addressability
- Multiapplication support
- Enhanced ease-of-use facilities
- Graphics
- Windowing
- Optional DOS environment
- Consistent user interface

SolutionPacs

The comprehensive approach of Personal System/2 gets down to specifics with IBM SolutionPacs.™ These integrated packages provide the right mix of products—software as well as hardware, in some cases—to help you become more productive quickly. SolutionPacs are available for such applications as general accounting, accounting tailored to particular industries, computer-aided design and drafting, desktop publishing and personal typing.

Software

Many popular software programs from IBM and other leading vendors are available on the 3.5-inch diskettes used with Personal System/2—and new advanced programs continue to be developed. In addition, several easy transition tools from IBM allow files and some programs[2] stored on 5.25-inch diskettes to be converted for use with IBM Personal System/2 models.

Displays

Created especially for Personal System/2 computers—yet compatible with the IBM Personal Computer line[6]—PS/2 color and monochrome displays provide new levels of performance. Complex graphics are brighter, higher in definition, and easier to understand than ever before. On-screen text is clean and easily readable. Whether you're viewing graphics or text, you'll get a steady picture and be able to view even tiny details in the screen image.

Printers

IBM's expanded line of printers can be used to produce everything from quick drafts to quality presentations with the IBM PS/2 models—as well as with systems in the IBM Personal Computer line. The print technologies you can choose include dot matrix, resistive ribbon thermal transfer, ink jet, daisywheel, and more. Whatever your needs, whatever your budget, there's an IBM personal printer to match both.

With Personal System/2, you're part of The Bigger Picture from IBM—and that means better solutions for you.

Personal System/2 model comparisons

Personal System/2	Model 25	Model 30	Model 50	Model 50 Z	Model 60	Model 70 386	Model 80 386
Machine numbers	8525-001, -004, -G01, -G04[a]	8530-002, -021	8550-021	8550-031, -061	8560-041, -071	8570-E61, -121, -A21	8580-041, -071, -111, -311
Processor							
Type	8086	8086	80286	80286	80286	80386	80386
Speed (MHz)	8	8	10	10	10	16 (-E61), 20 (-121) or 25 (-A21)	16 (-041, -071) or 20 (-111, -311)
Wait states	0	0	1	0	1	0-2[b]	1 (-041, -071) 0-2 (-111, -311)
Permanent memory (ROM)							
(KB)	64	64	128	128	128	128	128
User memory (RAM)[c]							
Standard	512KB 640KB[d]	640KB	1MB	1MB	1MB	1MB (-E61) 2MB (-121, -A21)	1MB (-041) 2MB (-071, -111, -311)
Maximum on system board	640KB	640KB	1MB	2MB	1MB	6MB (-E61, -121) 8MB (-A21)	2MB (-041, -071) 4MB (-111, -311)
System maximum	640KB	640KB	16MB	16MB	16MB	16MB	16MB
Integrated functions							
Parallel/serial/ pointing device port	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Graphics port	MCGA	MCGA	VGA	VGA	VGA	VGA	VGA
Disk/diskette controller	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clock/calendar	Optional	Yes	Yes	Yes	Yes	Yes	Yes
Expansion slots (available)	2[e]	3	3	3	7	3	7
Operating systems							
DOS 3.30	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Operating System/2	No	No	Yes	Yes	Yes	Yes	Yes
AIX™ Personal System/2	No	No	No	No	No	—	Yes
Diskette drives, 3.5-inch							
Capacity	720KB	720KB	1.44MB	1.44MB	1.44MB	1.44MB	1.44MB
Quantity standard	1[f] 2[g]	2 (-002) 1 (-021)	1	1	1	1	1
Fixed disk storage							
Standard (MB)	N/A	20 (-021)	20	30 (-031) 60 (-061)	44 (-041) 70 (-071)	60 (-E61) 120 (-121, -A21)	44 (-041) 70 (-071) 115 (-111) 314 (-311)
Maximum (MB)	20	20	60	60	88 (-041) 185 (-071)	60 (-E61) 120 (-121, -A21)	88 (-041) 384 (-071) 429 (-111) 628 (-311)
Supported displays	*Model 25 only:* 12-inch (diagonal measurement) monochrome display (-001 and -G01) or color display (-004 and -G04)			*All other models:* IBM Personal System/2 Color Displays 8512, 8513 and 8514; IBM Personal System/2 Monochrome Display 8503			
Supported printers	IBM Proprinter™ family, IBM Quietwriter® printers, IBM Wheelprinters, IBM Pageprinter (except Model 25), IBM Color Jetprinter						

Footnotes to text

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™ *PS/2, Operating System/2, OS/2, Micro Channel, Personal Computer XT, SolutionPac, AIX and Proprinter are trademarks of International Business Machines Corporation.*

[1] *IBM Operating System/2 supports IBM PS/2 Models 50 and 50 Z, 60, 70 386 and 80 386.*

[2] *Before copying any software product, be sure to read, understand and comply with the specific license agreement and installation instructions for that product.*

[3] *IBM Micro Channel architecture is a feature of IBM PS/2 Models 50 and 50 Z, 60, 70 386 and 80 386.*

[4] *8½ by 11-inch, double-spaced typewritten pages.*

[5] *DOS 3.30 also supports IBM Personal Computers.*

[6] *IBM Personal System/2 Display Adapter is required to support Personal System/2 Displays 8503, 8512, 8513 and 8514 on IBM PC products.*

Footnotes to chart

[a] *Also available as Collegiate Models 25-C02, -C05, -K02, -K05 and LAN Station Models 25-L01 and -L04.*

[b] *Except -A21 with 64KB of memory cache.*

[c] *128KB of this memory is reserved for hardware system use on Models 70 386, 80-111 and 80-311.*

[d] *On all models listed in footnote a.*

[e] *One full-size (except -L01 and -L04), one 8-inch.*

[f] *On Models 25-001, -004, -G01, -G04, -L01 and -L04.*

[g] *On all Collegiate models.*

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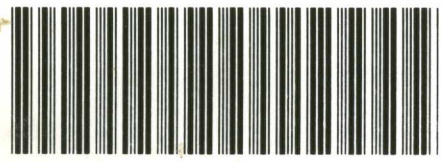

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